

Claim Amendments

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Currently Amended) A flame-retardant compound, comprising:

(a) a polyolefin alloy of two different types of polyolefins; and

(b) a combination of flame-retardant agents,

wherein one type of polyolefin ~~the polyolefin alloy~~ comprises at least one polyolefin ~~selected from the group consisting of polyethylene, maleated polypropylene, polypropylene, polybutylene, polyhexalene, polyoctene, ethylene-vinyl-acetate copolymer, and mixtures, blends or alloys thereof~~ thermoplastic and

wherein the other type of polyolefin is an elastomeric olefin copolymer to modify the modulus of the first type of polyolefin wherein the copolymer comprises ethylene monomer and a second olefin monomer having from 3 to 18 carbon atoms a polyolefin elastomer, and

wherein the flame-retardant agents comprise a an intercalated nanoclay and at least one inorganic flame-retardant, and

wherein one inorganic flame-retardant is a hydroxide present in the compound of at least ~~about~~ 65 parts by weight, per 100 parts by weight of polyolefin alloy.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The compound of Claim 1, wherein the one type at ~~least one~~ polyolefin comprises two polyethylene polyolefins and ethylene-vinyl acetate and wherein the other type of polyolefin comprises an ethylene-octene copolymer.

5. (Original) The compound of Claim 4, wherein there are at least two types of inorganic flame-retardants, and wherein one is a borate and another is a hydroxide.

6. (Original) The compound of Claim 5, wherein the hydroxide comprises magnesium hydroxide and aluminum hydroxide.

7. (Currently Amended) The compound of Claim 1, wherein the elastomeric olefin copolymer polyolefin elastomer is a metallocene-catalyzed-an olefin copolymer comprising from 2 to 20 weight percent of the total compound.

8. (Currently Amended) The compound of Claim 7, wherein the ~~polyolefin elastomer~~ copolymer is a copolymer of ethylene and octene monomers.

9. (Original) The compound of Claim 1, further comprising additives selected from the group consisting of fillers, antioxidants, stabilizer, lubricants, pigments, biocides, and combinations thereof.

10. (Original) The compound of Claim 1, wherein the compound is essentially halogen-free.

11. (Currently Amended) A biocidal, essentially halogen-free flame-retardant compound, comprising:

(a) an essentially halogen-free polyolefin alloy of two different types of polyolefins;

wherein one type of polyolefin comprises at least one polyolefin selected from the group consisting of polyethylene, maleated polypropylene, polypropylene, polybutylene, polyhexalene, polyoctene, ethylene-vinyl-acetate copolymer, and mixtures, blends or alloys thereof and

wherein the other type of polyolefin is an elastomeric olefin copolymer to modify the modulus of the first type of polyolefin wherein the copolymer comprises ethylene monomer and a second olefin monomer having from 3 to 18 carbon atoms;

(b) an essentially halogen-free flame retardant including an intercalated nanoclay; and

(c) a biocide consisting essentially of barium metaborate.

12. (Currently Amended) The compound of Claim 11,

~~wherein the polyolefin alloy comprises at least one polyolefin and a metallocene-catalyzed olefin copolymer, and~~

wherein the flame-retardant agents comprise a an intercalated nanoclay and at least one inorganic flame-retardant.

13. (Cancelled)

14. (Currently Amended) The compound of Claim 12, wherein the one type of at least one polyolefin comprises two polyethylene polyolefins and ethylene-vinyl acetate, and wherein there are at least two types of inorganic flame-retardants, and wherein one is a borate and another is a hydroxide.

15. (Currently Amended) The compound of Claim 14, wherein the hydroxide comprises magnesium hydroxide and aluminum hydroxide, and wherein the hydroxide is present in the compound of at least about 65 parts by weight, per 100 parts by weight of polyolefin alloy.

16. (Original) The compound of Claim 11, further comprising additives selected from the group consisting of fillers, antioxidants, stabilizer, lubricants, pigments, and combinations thereof.

17. (Currently Amended) ~~A surface covering~~ An article made from a compound according to Claim 1, wherein the compound is in the form of a film, a fiber, or a profile.

18. (Currently Amended) The article ~~surface covering~~ according to Claim 17, wherein the article is a surface covering comprising the film is laminated to a water-based adhesive.

19. (Currently Amended) The article ~~surface covering~~ according to Claim 18, wherein the surface covering further comprising comprises a reinforcing backing laminated to the adhesive.

20. (Currently Amended) A mammalian-occupied space having surfaces having a surface covering ~~according to Claim 1~~ comprising:
a film laminated to a water-based adhesive,
wherein the film comprises:
(a) a polyolefin alloy of two different types of polyolefins; and
(b) a combination of flame-retardant agents,
wherein one type of polyolefin comprises at least one polyolefin selected from the group consisting of polyethylene, maleated polypropylene, polypropylene, polybutylene, polyhexalene, polyoctene, ethylene-vinyl-acetate copolymer, and mixtures, blends or alloys thereof and
wherein the other type of polyolefin is an elastomeric olefin copolymer to modify the modulus of the first type of polyolefin wherein the copolymer comprises ethylene monomer and a second olefin monomer having from 3 to 18 carbon atoms, and
wherein the flame-retardant agents comprise an intercalated nanoclay and at least one inorganic flame-retardant, and
wherein one inorganic flame-retardant is a hydroxide present in the compound of at least 65 parts by weight, per 100 parts by weight of polyolefin alloy,

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wherein the surface covering passes ASTM E84-01 flame test when using a glass-reinforced concrete board substrate.